Microtus pennsylvanicus shattucki (Penobscot Meadow Vole)

Report Date: January 13, 2016

Priority 2 Species of Greatest Conservation Need (SGCN)

Class: Mammalia (Mammals)
Order: Rodentia (Rodents)

Family: Cricetidae (Hamsters, Voles, Lemmings, And Allies)

General comments:

Endemic to a few islands in Penobscot Bay. Previously listed as SC due to questions re validity as a subspecies. Subsequent studies support subspecies status, but not published and accepted by scientific community.

Species Conservation Range Maps for Penobscot Meadow Vole:

Town Map: <u>Microtus pennsylvanicus shattucki_Towns.pdf</u>
Subwatershed Map: <u>Microtus pennsylvanicus shattucki_HUC12.pdf</u>

SGCN Priority Ranking - Designation Criteria:

Risk of Extirpation: NA

State Special Concern or NMFS Species of Concern:

Microtus pennsylvanicus shattucki is listed as a species of Special Concern in Maine.

Recent Significant Declines: NA

Regional Endemic: NA

High Regional Conservation Priority:

NatureServe: Global Rank: T2

High Climate Change Vulnerability: NA

Understudied rare taxa: NA

Historical: NA

Culturally Significant: NA

Habitats Assigned to Penobscot Meadow Vole:

Formation Name Cliff & Rock

Macrogroup Name Rocky Coast

Habitat System Name: Rocky Coast Macrogroup - Unknown Habitat System **Notes:** *P. Meadow vole inhabits the islands of North Haven, Islesboro, and Tumbledown Dick in Penobscot Bay, Maine. They were likely brought to the islands inadvertantly by settlers and occupy habitats and dwellings similar to meadow voles on the mainland*

Stressors Assigned to Penobscot Meadow Vole:

Stressor Priority Level based on Severity and Actionability

	Moderate Severity	High Severity
Highly Actionable	Medium-High	High
Moderately Actionable	Medium	Medium-High
Actionable with Difficulty	Low	Low

IUCN Level 1 Threat Natural Systems Modifications

IUCN Level 2 Threat: Other Ecosystem Modifications

Severity: Moderate Severity **Actionability:** Moderately actionable

Notes: Habitat concitions promoted by past clearing and agricultureal use of some coastal islands inhabited by this

species may be giving way to succession into forest cover.

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IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Lack of knowledge

Severity: Moderate Severity Actionability: Moderately actionable

Notes: The status, population size, and distribution of this species is poorly documented for this state endemic

subspecies.

IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Storms and Flooding

Severity: Moderate Severity **Actionability:** Actionable with difficulty

Notes: Climate change will likely include increased storm severity and sea level rise. Since the Penobscot Meadow Vole is

mainly found on islands, they may be vulnerable to severe weather events.

Species Level Conservation Actions Assigned to Penobscot Meadow Vole:

None. Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.

Guild Level Conservation Actions:

This Species is currently not attributed to a guild.

Broad Taxonomic Group Conservation Actions:

Relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.